CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 99-061

WASTE DISCHARGE REQUIREMENTS FOR:

CATELLUS LAND DEVELOPMENT CORPORATION AND THE CITY OF FREMONT
PACIFIC COMMONS SITE
FREMONT, ALAMEDA COUNTY

1. The Catellus Land Development Corporation and the City of Fremont (hereinafter the Dischargers), propose to construct a 305-acre office park known as "Pacific Commons" and a four lane arterial road known as "Cushing Parkway Extension" (hereinafter the project), which will involve fill of 46 acres of delineated wetlands, 21.5 acres of which have been disclaimed from U.S. Army Corps of Engineers (hereinafter Corps) jurisdiction, on the 768-acre Pacific Commons site.

Site and Project Description

2. The project is located within the 768-acre Pacific Commons site, owned by Catellus, on property located west of Interstate 880 and south of the Automall Parkway in Fremont, Alameda County. The project, as currently proposed, will consist of a large commercial office park development, an extension of four lane Cushing Parkway, a new fire station, and a new city park/stormwater detention basin. The site is bounded to the south by office park developments, and to the west by the Warm Springs Seasonal Wetland Unit of the Don Edwards San Francisco Bay National Wildlife Refuge, the railroad tracks and the Tri-Cities Landfill, and on the north by a P.G.& E. transformer yard and an office park and commercial development. The 46 acres of wetland proposed for fill includes vernal pools, seasonal wetlands and wet meadows. Of the total 768-acre site, 391 acres are proposed to be devoted in perpetuity to a Preserve, containing preserved and re-created vernal pools, wet meadows, and seasonal wetlands as mitigation. The remaining area would provide the Cushing Parkway access and other roads (11 acres), a city sports park /stormwater detention basin (49 acres), and the remaining, realigned N-1 flood control channel (12 acres), in addition to the 305-acre office park . An additional 53 acres would be restored and preserved offsite as mitigation on the Stevenson Parcel, located just north of the Pacific Commons site. Also, an 840-acre habitat preservation easement would be dedicated, as mitigation for on-site impacts, to the long-term protection of the California tiger salamander on the Kammerer parcel east of San Jose, within 40 miles of the site. This 840 acre easement would be part of 1756-acre conservation easement over the entire Kammerer ranch parcel.

3. Site History: The Pacific Commons site has had a variety of past uses, including farming and ranching over most of the site. Farming on part of the site continued until as late as 1995. Most of the site has been leveled and farmed over the past decade. Other past uses

of the site include an outdoor theater arena, a sky sailing airport, a flea market, and an auto raceway complex. Approximately 20 acres of the north central portion of the site were excavated in 1990 to provide fill for the nearby "Auto Mall" complex along Highway 880. The resulting pond, known as "Oklahoma" because of its shape, eventually provided seasonally ponded wetland habitat for the endangered vernal pool tadpole shrimp. The past uses of the Pacific Commons site and the surrounding lands have resulted in a mixture of both surviving special status plant and animal species, and the habitat they require, and invasive species that threaten the well-being of these sensitive and endangered native species.

Due to the decades of land disturbance, the seasonally wet features at the site are predominantly manmade, and include drainage ditches from farm activities and rubble piles from past paving. While the Pacific Commons site may have had more natural vernal pool topography in the past, the agricultural and industrial activities of the past 100 years (leveling, berming, leveeing, draining, and irrigating) have altered the original soils and land contours on most of the site. The "Section 404 Permit Application "Alternatives Analysis" for the Pacific Commons Project in the Industrial Redevelopment Area of Fremont, California", dated September1998, (Alternatives Analysis), describes the current site as having "stagnated surface drainage" and being dominated by grassland vegetation, much of which is non-native. Portions of the site have hydric soils, flat terrain, and depressions shallow enough to allow for seasonal drying and thus to keep out perennial wetland plants or trees. Such areas can support vernal pool endemics such as the goldfield plant and other seasonal pool habitats.

Regulatory Authority and Findings

4. To protect the water quality at and in the vicinity of the Pacific Commons site for the duration of project construction, to adequately address proposed project impacts and mitigation to waters of the State, to meet the objectives of the California Wetland Conservation Policy, to require appropriate changes over the life of the project and its construction, and to address public concerns in an environmentally responsible way, the Board has determined to regulate discharge of dredged and fill material to surface waters at the site by issuance of Waste Discharge Requirements (WDRs).

5. The Dischargers have applied to the Board for Water Quality Certification under Section 401 of the Clean Water Act. On September 10, 1998, the U. S. Army Corps of Engineers (hereinafter Corps) re-issued a Public Notice for an Individual Section 404 permit. The first Public Notice issued for this project was in 1996. However the project was sufficiently changed and the City of Fremont became an additional applicant, so the Public Notice was reissued by the Corps.

6. State authority to regulate the discharge, and threatened discharge of waste to Waters of the State, including surface water, groundwater, and wetlands was granted to the State Water Resources Control Board in the Porter-Cologne Water Quality Act (Act). Water

Quality Control Plans implement the Act by designating the beneficial uses to be protected, and the water quality objectives reasonably required for that purpose.

7. The Board, on June 21, 1995, adopted, in accordance with Section 13244 et. seq. of the California Water Code, a revised Water Quality Control Plan, San Francisco Bay Basin (Basin Plan). This updated and consolidated revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters. This order is in compliance with the Basin Plan.

8. This Order regulates the discharge of dredged and fill material to surface waters and does not apply to stormwater discharges associated with construction activities. The Dischargers are responsible for obtaining and complying with the rules and regulations of National Pollutant Discharge Elimination System (NPDES) permit requirements for such activities.

9. The project site is located within the South Bay Basin as identified in the Basin Plan. The following beneficial uses which are currently or have recently been in evidence on the site are identified in the Basin Plan: Warm Freshwater Habitat, Preservation of Rare and Endangered Species, Wildlife Habitat, Agricultural Supply, Groundwater Recharge, and Non-contact Water Recreation.

10. The Basin Plan Wetland Fill Policy establishes that there is to be no net loss of wetland acreage and no net loss of wetland value when the project and any proposed mitigation are evaluated together, and that mitigation for wetland fill projects is to be located in the same area of the Region, wherever possible, as the project. The Policy further establishes that wetland disturbances should be avoided whenever possible, and if not possible, should be minimized, and only after avoidance and minimization of impacts should mitigation for lost wetlands be considered. The Dischargers have submitted documentation to show that appropriate effort was made to avoid and then to minimize wetland disturbance, as required by the Basin Plan.

Additional Findings

11. The City of Fremont approved Catellus' plan for development at the Pacific Commons site and certified the Final Supplemental EIR for the project in 1996 . During the two years after EIR adoption, workshops were held with staff of the Corps of Engineers (Corps), the U.S. Fish and Wildlife Service (FWS), the U.S. Environmental Protection Agency (EPA), the California Department of Fish and Game (DFG), and the Board to determine how to further minimize onsite development impacts to wetlands and special status species. After extensive re-working of the original proposal, the Corps Public Notice, which had been originally issued in 1996, was reissued in September 1998. Many meetings and discussions of alternatives resulted in the project that includes the

391-acre Preserve configuration, and an elevated design for Cushing Boulevard, intended to minimize impacts from the roadway footprint and allow species movement under the elevated roadway. The Preserve is contiguous to the existing Seasonal Wetland Unit of the Don Edwards San Francisco Bay National Wildlife Refuge (hereinafter Refuge).

In addition to the 391-acre Preserve, the project allows for 305 acres of development activity. The 391-acre Preserve will be donated to the Refuge, along with funding for long term maintenance, once the regulatory agencies determine that the project has been successful in achieving the performance criteria spelled out in the project's Ecosystem Restoration Plan and in the FWS Biological Opinion for the site dated May 14, 1999, after the minimum of a ten year monitoring period. This preferred alternative is described as "Alternative 9" in the Alternatives Analysis. This Alternatives Analysis document also contains the "Ecosystem Restoration Plan" as Appendix D of the Alternatives Analysis.

12. Project Wetland Impacts: The total area of wetlands on the 768-acre site is 105 acres. Of those wetland acres, 59 acres will be avoided and 46 acres are proposed to be filled. Of the 46 acres proposed to be filled, 21.5 have been repeatedly jurisdictionally disclaimed by the Corps over the past decade and a half because of their location within a utility maintenance corridor which contains several large underground pipelines and high tension power lines.

Wetland Impacts, Avoidance, and Restoration Acreage Summary

Wetland Impacts, Development Envelope	Acres
Seasonally Ponded Wetlands (including vernal pools)	36.2
Wet Meadows	9.8
Total Wetland Fill Impacts (21.5 acres disclaimed by Corps)	46.0
Wetland Avoided (Outside Development Envelope)	
Seasonally Ponded Wetlands	38.3
Wet Meadows	21.3
Total Wetland Avoided	59.6
Wetland Mitigation (on 391 acre parcel - 4 acres wet meadow impacted by mitigation creation)	69.0
On Stevenson parcel	8
Total Wetland Mitigation Created	77
Area within Preserve on main project site	
Total post-restoration wetland area on Preserve	128.6
Upland habitat and buffer	262.4

Total Preserve Area on main project site	391

If pre-construction physical site investigations and/or the results of the first phase of restoration reveals that it will not be possible to restore and construct 69.0 acres of wetlands in the Preserve, or if after a majority of the ten-year monitoring period some portion of the created wetland is unsuccessful and cannot be repaired, the shortfall will be made up by restoration and construction on an off-site parcel selected from the Refuge's list of "Ownerships and Acreages of Lands Within the Proposed Refuge Expansion Area" (see Provision B. 22).

In addition to the above impacted and restored wetland acreage, off-site mitigation at the 53-acre Stevenson Parcel, which is already owned by Catellus, will add 8 more created wetland mitigation acres, and 7 more preserved wetland acres.

The Corps has disclaimed jurisdiction over approximately 35 (including 21.5 acres of the 46 to be filled) acres of delineated wetlands in the central portion of the Pacific Commons site, because it determined in 1979 that a large portion of the site would not "involve the discharge of dredged or fill material into a water of the United States". However, the Dischargers generally did not distinguish between jurisdictional and non-jurisdictional wetlands in the alternatives analysis conducted for the project.

In addition to the impacts and mitigation described above, the Dischargers will provide additional compensatory mitigation in two forms:

a) Refuge Capital Improvements With Maintenance Endowment

The Dischargers will provide funding for capital improvements, with a maintenance endowment, for the Refuge's existing 255-acre Seasonal Wetlands Unit. The Dischargers shall submit a plan and schedule for providing such funding, acceptable to the Executive Officer, by September 3, 1999. This is the Reference site for the mitigation to be constructed, and is important endangered species habitat.

b) Additional Mitigation Property

The Dischargers will acquire additional wetlands habitat acreage, or land on which additional mitigation can be constructed, from the Refuge's list of desirable acquisitions (Attachment C.). This acquisition and the conveyance to the Refuge of this acquisition shall include appropriate capital improvements, such as fencing.

Special Status Species

13. Contra Costa Goldfields (CCG) is a native vernal pool plant species and is listed as federally endangered. Surveys located approximately 3,100 plants in 5 small subpopulations on about 4 acres in the southeastern portion of site. Many more plants were found on the adjoining Refuge. The plant is in danger of being taken over by non-native grasses, especially ryegrass. This species and other grasses are becoming established in the wetlands occupied by Contra Costa Goldfields both on the site and in the adjacent Refuge. The Alternatives Analysis notes that the spread of the non-native grasses is due in part to a lack of grazing which previously kept these invasive grasses in check. On both the Refuge and the proposed Preserve, the increasing grass cover and associated thatch are threatening to reduce the size of the Contra Costa Goldfield populations. Grazing and other management techniques such as mowing, controlled burning and selective use of herbicides will be used during the 10-year monitoring period and during long term management to allow the Contra Costa Goldfields to establish.

14. Vernal Pool Tadpole Shrimp (VPTS) is a federally protected species that would be impacted by the project. The VPTS has been found on site and in the adjacent Refuge. This tiny shrimp requires freshwater seasonal pools that pond for at least 7 weeks in order to allow eggs to hatch and reach reproductive maturity. Larger and deeper pools with exposed mud bottoms provide even better habitat for this species. Heavily vegetated, thatched, or saline ponds provide poor or no habitat for the VPTS. 62 acres of the site were determined to provide VPTS habitat, and 31 of these acres are planned to remain in the Preserve. VPTS have reproduced successfully in the newly created vernal pools in the site's pilot mitigation area. The FWS requires three breeding seasons be successful in the mitigation area before Development Area "B" can be filled (figure 2, Attachment A). The performance criteria for the VPTS are contained in Provisions B. 17., 18., and 20.

15. California tiger salamander (CTS) is a candidate for listing under the federal Endangered Species Act. 1997 surveys found CTS larvae and adults on the Pacific Commons site. A mitigation agreement between the Dischargers and DFG requires the Dischargers to acquire a habitat preservation easement for a minimum of 400 acres off-site at existing CTS aestivation habitat as mitigation for development of the same amount of acreage in the central portion of the Pacific Commons site. The Dischargers current project involves the purchase of a habitat preservation easement for 840 acres of the Kammerer parcel in east San Jose. The entire Kammerer Ranch parcel of 1756 acres will be protected under a conservation easement, to be held by the Nature Conservancy. The performance criteria for CTS on-site are described in Provision B. 17.

16. Burrowing Owl (BO) is not a special status species, but is protected under the California Fish and Game Code. Surveys found occupied and active burrows used by the BO, so artificial nesting burrows were constructed last winter. More surveys will be conducted and monitoring of artificial burrows will be part of the final monitoring plan. Grass heights will be controlled in sensitive areas to allow the BO to detect predators. There is no performance criteria for BO, however monitoring will be carried out.

Avoidance, Minimization and Mitigation

17. The Pacific Commons site poses a dilemma for conventional avoidance. Excepting the requirements of the Endangered Species Act, if the Dischargers provided plans based only on avoidance, many small wetland features would be surrounded by non-jurisdictional land, leading to a maximum disturbed boundary, and degrading the functions of these "avoided" wetlands, even with buffers present. The desire to maximize functions such as habitat value and protection of the special status species, and to reduce the urban boundary or disturbed edge to the minimum have led to the current project and the preservation of 391 southern acres of the site.

A total of 28 alternatives (12 onsite and 16 offsite) were considered in the Alternatives Analysis. The 12 onsite alternatives were analyzed for:

(1) Significant Net Onsite Increase in Wetlands
(2) Avoidance of Contra Costa Goldfields
(3) Significant Net Onsite Increase in Vernal Pool Tadpole Shrimp Habitat
(4) Biological Connectivity of All Preserve Areas(s) to Refuge
(5) Avoidance of Jeopardy to Endangered Species
(6) Meet Five-Minute Emergency Response Standard
(7) Alternative Evacuation Route for I-880 Emergency
(8) Meet Regional Arterial Needs
(9) Jobs-Housing Balance
(10)Infrastructure Financing Commitments
(11) Annual Funding for City Services
(12) Recreational Park (Siting and Funding)
(13) Educational & Social Welfare (Siting and Funding)
(14) Overall Project Feasibility

In addition to the 28 alternatives considered in the Alternatives Analysis, 6 alternative alignments for the Cushing Parkway extension were also covered in the workshops and meetings. The elevating of the Cushing Parkway to avoid impacts to sensitive species is estimated to add an additional $8 million in construction costs.

The Preferred Alternative (Alternative 9 of the Alternatives Analysis, September 1998):

18. The project is the preferred alternative and provides for the following:

- 391 acres of the 768-acre Pacific Commons site will be restored and preserved in perpetuity as a permanent seasonal wetlands habitat Preserve located contiguous to the existing Refuge.
- 53 acres of the nearby "Stevenson" parcel will also be preserved and restored for seasonal wetlands and protected species, including the VPTS and CTS.

- The City of Fremont's recreation sports park will be co-located with stormwater management facilities (detention/retention basins) on 49 acres of the site.
- The N-1 stormwater channel will be removed from the Preserve and realigned along the northern edge of the Preserve to drain the proposed development area.
- 305 acres will be developed as an office park in multi-storied structures.
- VPTS Habitat: 69 acres of vernal pools will be created and 59 acres of existing seasonal wetland will be preserved and maintained on the 391-acrePreserve.
- New VPTS habitat has already been constructed. The "Oklahoma" pond will not be filled until 3 years of monitoring have confirmed the successful establishment of VPTS habitat.
- The Cushing Parkway extension will be elevated.
- The "Urban edge" will be minimized through the large single Preserve parcel that is contiguous with Refuge.
- All CCG areas, which are all within the 391-acre Preserve, will be avoided and buffered.

19. Mitigation and Preserve

The goal of the project's mitigation will be to establish an onsite wetland-upland mosaic comprising vernal pools, connecting swales, and other seasonal wetland habitats, in addition to level and mounded upland topography. The mitigation project will seek to achieve this balanced ecosystem by restoring hydrologic connectivity, creating a self-sustaining/resilient ecological unit, preserving and restoring VPTS and CTS habitat, avoiding and maintaining CCG habitat, providing for BO habitat in upland areas of the preserve, maintaining buffers, maintaining surface water flows, and preserving wildlife migration corridors beneath Cushing Parkway.

The new seasonal wetland/vernal pool complex will reflect the type of topography found in the adjoining Refuge, but the Preserve as a whole will contain more uplands than wetlands, in excess of the average 55:45 uplands/wetlands ratio that is found in the Refuge. The resultant ratio is based on the professional judgment of FWS personnel whose experience with other vernal pool habitat made them skeptical the Preserve could support a 45% wetland density as originally proposed. Overall wetland density on the Preserve will thus be 32%, and inundated pool density for VPTS habitat will be 10-15%. This is based on historic photos, soil samples, and site characteristics of undisturbed portions of the Refuge.

20. The Reference Site

A template for the Preserve will be provided by observation and analysis of data obtained from the Reference Site, the Warm Springs Seasonal Wetland Unit (SWU) of the Refuge, a 255 acre area acquired by the FWS. The Refuge shares a common eastern and northern boundary with the Pacific Commons site. The Reference Site will comprise one or more mosaics of wetlands and uplands selected to represent the range in physical and hydrologic conditions within relatively undisturbed portions of the SWU, containing vernal pools, connecting swales, and seasonal wetlands. The reference mosaic is part of a

mound-and-depression micro topography on Pescadero (drained) and Willows clay soils, both of which occur on the Pacific Commons site. Hydrologic and topographic data have already been collected and soils data will be collected. These data will provide important information for developing the ecological restoration plan including information on slopes between the uplands and wetlands, widths and shapes of swale bottoms, shapes of vernal pools, swale gradients, outlet elevations of vernal pools "imbedded" in the swales, and the general pattern of original wetland and upland habitats.

The Preserve is expected to be ecologically valuable and successful because:
1. it will have the same density and pattern, soils, topography, and physical properties of the original native wetlands;
2. inundation periods and soil saturation will approximate characteristics of native wetlands;
3. it will provide habitat for core regional flora;
4. the wetlands will be subject to a long-term management plan; and
5. the site is suitable for re-establishment of CCGs, VPTS, and, depending upon periods of inundation of the deeper wetlands and vernal pools, the CTS.

21. Long Term Management of Invasive Species

Non-native grasses are likely to spread and cover the bottoms of existing and restored high quality VPTS pools unless management, such as grazing and mowing, and, in extreme cases, use of controlled burning and/or herbicides, is actively employed. The five most threatening species listed in the Alternatives Analysis are: Bermuda grass, dallis grass (*Paspalum dilitatum*), Phyla (*Phyla nodiflora*), Harding Grass, and broadleaf peppergrass (*Lepidium latifolium*). A sixth species, ryegrass (*Lolium multiflorum*) bears watching for its ability to endanger the CCG populations.

Recognizing the need to control these and other invasive species, the applicants have provided a long-term strategy for managing the Preserve which includes grazing by either cattle or sheep, with horses as yet a third alternative, mowing, controlled burning, and limited herbicide use (Wetland Research Associates, Inc. and SAGE Associates, 1999). The Dischargers will also be employing a mechanical implement to remove accumulated thatch in some portions of the Preserve.

Phasing, Performance Criteria and Monitoring

22. Phasing. The first phase of the project has occurred before any of the major permitting actions, as the Dischargers have already constructed approximately 7 acres of vernal pools on 19 acres of the Preserve. This pilot was created to provide additional VPTS habitat and to gain vernal pool design information to be used in the other phases of the restoration. The goals of constructing the project and the mitigation in phases are:

a. To ensure that a healthy and reproducing stock of special status species are maintained in the mitigation areas and preserve, prior to destruction of habitat within the development area.

b. To gain more accurate design information and therefore design and construct the later phases of the mitigation adaptively, building on information gathered from earlier phases.

c. To buffer the disruptive effects of mitigation construction on the special status species by avoiding disturbing a large portion of the existing habitat at one time.

23. Four Phases of Restoration Construction. The mitigation construction will occur in four phases, the first of which, Phase 1, has already been built. The complex mosaic of vernal pool wetlands constructed can be seen in the restoration plan (Figure 1, Attachment A). Phase 1 includes successful translocation of VPTS in the constructed vernal pools on the Stem Parcel. One season of success during 1998 and 1999 has been documented for these VPTS, and two more successful seasons are required by the FWS Biological Opinion in order to proceed with development of Development Area "B" (Figure 2, Attachment A). Approximately 7 acres of vernal pools were constructed during Phase 1. In addition to the four phases of restoration construction, management of invasive "pest" plants on the Preserve will begin currently, and will be a management effort on the site in perpetuity.

Phase 2 restoration construction is scheduled for late 1999 (Figure 3, Attachment A). Development Area "A", (Figure 2, Attachment A) will be developed and the Cushing Parkway will be constructed, including fill of approximately 1.8 acres of the Oklahoma pond. Also included in this phase is underground storm water drainage pipe installation and, possibly, the construction of Nobel Drive.

Phase 3 restoration construction is scheduled for 2000 (Figure 3, Attachment A), and will involve restoration near the CCG areas in the southeast portion of the site, as well as along the utility corridor on the Refuge boundary.

Phase 4 , the final phase of wetland construction, is scheduled as early as winter/spring of 2001 if VPTS reproduction success in the Phase 1 ponds continues to be successful. Development of Area "B", the remainder of the development area, would then proceed, along with the final phase of wetland construction.

Both the Development Areas and the restored Preserve will take several years to complete. Most of the initial work to construct the restoration will occur in the first three years, but adjustments will probably be necessary, based on data collected and analyzed from the reference site at the Refuge, and direct monitoring of the constructed vernal pools.

Performance Criteria

24. Three types of habitat will be assessed to determine if the mitigation performs adequately: vernal pools, VPTS habitat, and seasonal wetlands. The distinction between vernal pools and VPTS habitat is based on the relatively long period of inundation required by the VPTS for survival (no less than 60 days) and vegetation (VPTS needs less

than 30% cover). Most of the hydrology performance criteria listed below are required during the last eight of the ten-year monitoring period. While there are not large sets of projects with which to compare the performance criteria for this project, the performance criteria provided by the Dischargers appear likely to protect wetland functions, as long as adequate provisions are made to assure that non-native plants are controlled before they take over the site and prevent the spread of native species.

25. Hydrology Criteria

(a) Vernal Pools: the number of days required to attain a functional water level, the number of days this inundation is maintained, and the number of days to drainage must all fall within the range of means for the reference vernal pools over the same period.

(b) VPTS habitat: must have standing water > 0.2 feet for at least 60 consecutive days for years when total rainfall is at least 75% of normal.

(c) CTS breeding habitat: will contain standing water continuously between January 1 and June 1 in years of average or above-average rainfall.

(d) Seasonal Wetlands: the mean number of consecutive days over which the upper 0.5 feet of soil at the swale is saturated or inundated exceeds 30 days.

26. Vegetation Criteria

(a) Vernal Pools:

1. vegetation will be dominated by hydrophytic vegetation.

2. the number of vernal pool species will be at least 80% of the average number of vernal pool species in the source or reference pools.

3. the total canopy cover of vernal pool species will be at least 50% of the average cover of vernal pools species in the reference pools.

4. the total cover will show no significant declines during the monitoring period.

(b) Seasonal Wetlands vegetation: Same criteria as Vernal Pool vegetation

(c) VPTS habitat: suitable vegetation is unknown, but percent cover should be < 30%. Also, thick organic matter should not cover more than an additional 30%.

(d) CTS: no vegetation criteria used

27. Special Status Species Criteria

(a) VPTS:

1. standing water at >0.2 ft for at least 60 consecutive days during years when total rainfall is at least 75% of normal
2. vegetation is hydrophytic and total cover < 30%
3. organic matter covers < 30% of bottom
4. VPTS are present

(b) For Phase 1: Three years of monitoring must reveal gravid females present in wetlands designated as VPTS habitat based on counts of adults when wetlands contain water, unless dry-season sampling is necessary. This criteria must be met before Development Area "B" can be filled, (see Figure 2, Attachment A). At least 50% of all pools created specifically as VPTS habitat in Phase 1 (at least 9 pools) will have gravid female VPTS for 3 years in the same pools. In year when no gravid female VPTS are found in the "Oklahoma" pond, at least 25% of the Phase one VPTS ponds must have gravid female VPTS. The presence of eggs during dry sampling years will not be adequate proof of success, unless there is a means of distinguishing between eggs that were translocated and eggs that were laid *in situ*. Sampling should follow protocols recommended by the FWS.

(c) CTS breeding ponds: must contain standing water continuously between January 1 and June 1 in years of average or above-average rainfall.

28. Monitoring

Monitoring of the above performance criteria and for general trends relevant to the target species and habitats will continue for 10 years. All constructed and restored wetlands in Phase 1 will be monitored, but the exact number of wetlands to be sampled in Phase 2 has not yet been determined, and is awaiting analysis of Phase 1 data.

If monitoring shows any wetlands to be in irreparable failure, replacement wetlands will be restored or constructed the following year, and the monitoring program will begin again. If the wetlands may fail but remedial action can bring them into conformance with the performance criteria, appropriate remediation will be undertaken.

If more than 30% of any individual failing mitigation wetlands must be repaired, then monitoring for those wetlands will be extended for 2 years. If less than 30% of any individual failing mitigation wetlands must be repaired, then the monitoring schedule can continue through year 10. If more than 30% of the wetlands in the entire mitigation site requires significant repair of any type, then the entire site will be monitored for an additional 2 years.

Annual reports will be provided and will include methods used, locations sampled, results of monitoring, trends, reference weather conditions, comparison of the Preserve with the Reference Site, condition of sensitive species, wildlife use, recommendations, aquatic invertebrate community development, management actions taken, and responsible parties.

29. Stormwater Quality Measures:

The applicants will incorporate permanent stormwater quality control measures such as vegetated swales in the commercial development. In addition, approximately 20 acres of the northwest corner of the development will be used as a stormwater detention basin for water quality improvement All of the stormwater from the 305-acre commercial development will be directed away from the Preserve and mitigation. Stormwater discharges to surface waters associated with construction activities and post project construction will occur, and will be regulated under the appropriate NPDES permit.

30. Contingency Measures:
The Dischargers have proposed a conceptual mitigation plan and design principles as a part of the project, contained in the "Ecosystem Restoration Plan", Appendix D. of the Alternatives Analysis, to offset the loss of beneficial uses of waters of the State. The mitigation pilot (Phase 1) is proving that the creation of vernal pools has a high likelihood of success. The total acreage of mitigation wetlands the Dischargers have committed to create is 77 acres. Final mitigation design plans will be submitted for review by the Executive Officer according to the schedule outlined in Provision B. 12. If the created wetlands do not achieve performance criteria after a reasonable portion of the monitoring period, even after repairs have been attempted, the Dischargers will obtain property from the Refuge property acquisition list, and compensatory wetland creation will occur there. Provision B. 22. requires this compensation to occur at a ratio of 2 acres replaced to that unsuccessfully constructed, to further compensate for temporal losses. This is not anticipated to be necessary, and the need would not be identified until at least five years after restoration construction.

31. Long Term Maintenance and Management:
A long-term management plan has been submitted, and is under review by the regulating agencies. The FWS will implement the plan, once the mitigation is successful and meets final performance criteria. At that time, the Preserve will be transferred to the Refuge. The plan focuses on the costs and logistics of mowing and grazing, by sheep or cattle, to control weeds and exotic grasses, particularly in the vernal pools. The Dischargers have committed to endowing the long-term maintenance of the Preserve in perpetuity, as they will do for the offsite CTS preserve.

32. Financial Assurance. The Dischargers will provide a surety bond in the amount of all of the costs associated with constructing , monitoring, and, if necessary, repairing the mitigation during the ten or more year period prior to the Preserve wetland meeting performance criteria. The Dischargers currently estimate this amount to be $10 million dollars. Portions of the funding security will be canceled as portions of the work are completed. The Dischargers are responsible for all funding of the construction, the ten year monitoring program and all management activities, prior to the attainment of performance criteria. Detailed estimates of construction, monitoring, and management and maintenance costs will be developed and these will serve as the basis for the surety bond.

33. The California Environmental Quality Act (CEQA) requires all projects approved by State agencies to be in full compliance with CEQA, and requires a lead agency to prepare an appropriate environmental document (EIR or Negative Declaration) for such projects. The City of Fremont approved the re-development plan for the 768-acre site in 1996, based on a certified final EIR which identified several potential significant impacts to the environment. The impacts were to 105 acres of wetlands and of special status species such as CCG, the VPTS, the CTS, and the BO.

    Potential significant impacts to water quality and proposed mitigation measures to avoid or lessen significant impacts to an insignificant level were identified in these EIR. These include Mitigation 6-4 of the Draft Supplemental EIR which describes Policy Open Space Goal 2.2.1, a requirement for "no net loss of wetlands as a result of development in Fremont." In addition, there are Special Status Species mitigations and Vegetation mitigations, similar to the performance criteria goals in this Order. These mitigation measures are incorporated as requirements of this Order.

34. Pursuant to Title 23, California Code of Regulations Section 3857, the Board is issuing WDRs and will not act on the Dischargers' application for Water Quality Certification.

35. The Board has notified the Dischargers and interested agencies and persons of its intent to prescribe WDRs for this discharge.

36. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Dischargers, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The direct discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. The discharge of oil, gasoline, diesel fuel, any petroleum derivative, any toxic chemical, or hazardous waste is prohibited.

3. The discharge of waste shall not cause a pollution or nuisance as defined in Section 13050 of the California Water Code.

4. At no time shall surplus or waste earthen materials be placed in surface drainage courses or ponded areas, or in such a manner as to allow the discharge of such materials to adjacent undisturbed land or to any surface water drainage course except as authorized by the Order and described in Finding 1 and 2, and Provision B. 30.

5. Discharges of materials which are not otherwise regulated by a NPDES permit or allowed by this Order to waters of the State are prohibited.

6. In accordance with Section 13260 of the California Water Code, the Dischargers shall file a report with this Board of any material change or proposed change in the character, location, or volume of the discharge. Any proposed material change in the operation shall be reported to the Executive Officer at least 30 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant new soil disturbances, all proposed expansions of development, or any change in drainage characteristics at the project site.

7. The Dischargers shall immediately notify the Board by telephone whenever an adverse condition occurs as a result of this discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this Order, significant spill of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance. Pursuant to Section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Board within two weeks of occurrence. The written notification shall identify the adverse condition, describe the actions necessary to remedy the condition, and specify a time table, subject to the modifications of the Board, for the remedial actions.

8. The groundwater shall not be degraded as a result of project construction and related activities.

B. Provisions

1. The Dischargers shall comply with all the Prohibitions and Provisions of this Order immediately upon adoption of this Order or as provided below.

2. To reduce impacts from increased runoff and increases in pollutants in runoff from the project site, the Dischargers shall implement Best Management Practices (BMPs). As of the date of adoption of this Order, the specific BMP Plan for the project has not been finalized. The Dischargers shall submit a BMP Plan, including permanent stormwater pollution control measures to be constructed as part of the development project, and maintained for the life of the project, subject to the approval of the Executive Officer, no less than 30 days prior to the initiation of development-related ground disturbance activities. The BMP Plan may be amended with written approval of the Executive Officer.

3. To avoid spills during construction, which have the potential to impact the site's water quality, the Dischargers shall develop and submit a Storm Water Pollution Prevention Plan (SWPPP) for approval by the Executive Officer prior to construction. The SWPPP shall identify and detail storm water pollution prevention measures that will be constructed and implemented at the site.

4. The Dischargers shall notify the Board in writing 30 days prior to actual start dates for each phase of wetland and development construction.

5. The Dischargers shall at all times fully comply with the engineering plans, specifications, and technical reports submitted with the Dischargers' application for water quality certification and the completed report of waste discharge. The Dischargers' plans describe a total of 77 acres of mitigation wetlands to be constructed. Of this total, 69 acres will be constructed on a 391-acre Preserve, which is adjacent to the project and the Refuge, and 8 acres will be constructed on the 53-acre Stevenson parcel which is located north of the project. The 77 acres of constructed wetlands are designed to primarily function as vernal pool habitat. Additional mitigation will be undertaken by the Dischargers as required by Provision B. 26.

6. To reduce the potential impacts to water quality, the Dischargers will divert any flow around construction and/or restoration work within waterbodies using a diversion channel, pipe, or other practices such that the flow does not flow across the work area and no equipment operates in areas of flowing or standing water.

7. All reports pursuant to these Provisions shall be prepared under the supervision of a suitable professional registered in the State of California.

8. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 27, Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations shall be conducted in accordance with applicable state and federal regulations.

9. The Dischargers shall remove and relocate any wastes which are discharged at any locations on or off the site in violation of this Order.

10. The Dischargers shall file with the Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these Requirements, this includes any proposed change in the boundaries of the components of the project on the site.

11. The Dischargers shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

12. The Dischargers are considered to have full responsibility for correcting any and all problems which arise in the event of a failure which results in an unauthorized release of waste or wastewater.

13. The Dischargers shall permit the Board or its authorized representative, upon presentation of credentials:

    a. Entry on to the site or any premises in which records are kept.

b. Access to copy any records required to be kept under the terms and conditions of this Order.

c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.

d. Sampling of any discharge or surface water covered by this Order.

Monitoring and Mitigation Plan

14. The Dischargers shall submit a Final Mitigation and Monitoring Plan (MMP) for Phase 2, subject to the approval of the Executive Officer, no less than 30 days prior to the initiation of development-related ground disturbance activities in either Development Area A or mitigation Preserve Phase 2. If Phase 2 is constructed after 1999, the MMP will be submitted no less than 60 days prior to initiation of construction-related ground disturbance activities. This MMP may contain design elements which will require adaptation and refinement in the field during construction, but the final design wetland acreage for the phase must be specifically defined. The Discharger shall submit a monitoring plan for Phase 1, which has already been constructed, 60 days after the adoption of this Order, subject to the approval of the Executive Officer. The Dischargers shall submit MMPs for Phases 3 and 4 on April 1 of each of the years these Phases are to be constructed, subject to the Executive Officer's approval. Phase 3 will be constructed the year after Phase 2, and Phase 4 will be constructed the year after Phase 3. These MMPs shall include specific performance criteria and final designs for re-creation of vernal pools and seasonal wetlands.

The MMPs will also contain the form and projected content of the annual reports to be submitted each year of the ten year monitoring period. These reports will include descriptions of monitoring methods used, locations sampled, representative photographs, results of monitoring, reference site data and analysis, condition of sensitive species, wildlife use, aquatic invertebrate community development, management actions taken, and responsible parties, and recommendations, and other appropriate items. These reports will be due on July 1 of each year, unless another date is approved by the Executive Officer.

Mitigation will occur in four phases, (see Figure 3, Attachment A). Construction and fill will occur in two phases. The first phase in Development Area A, (see Figure 2, Attachment A) will occur upon receipt of all relevant permits. The second phase of development construction and fill in Development Area B will occur after Phase 1 of the mitigation, the Pilot wetland, demonstrates VPTS reproduction over three wet seasons, one of which has already been successfully demonstrated. At least 50% of all pools created specifically as VPTS habitat in Phase 1 (at least 9 pools) will have gravid female VPTS for 3 years. In year when no gravid female VPTS are found in the "Oklahoma" pond, at least 25% of the Phase one VPTS ponds must have gravid female VPTS. The presence of eggs during dry sampling years will not be adequate proof of success, unless

there is a means of distinguishing between eggs that were translocated and eggs that were laid *in situ*. Sampling should follow protocols recommended by the U.S. FWS.

If the VPTS reproduction project is not successful after two more wet seasons, the Dischargers will either (1) withhold from developing Development Area B until a total of two additional reproductive seasons have been achieved, or (2) proceed with developing Development Area B after aquiring property and concurrently creating, restoring and preserving new habitat equivalent in acreage and habitat to that lost by filling the Oklahoma pool, subject to the approval of the FWS and the Executive Officer. Each phase will be monitored for a minimum of ten years from the date of construction. The dischargers shall notify the Board in writing of the actual start dates of each phase of mitigation. Any substantive future changes to the Final MMP must be approved in writing in advance by the Executive Officer.

Mitigation Performance Criteria

15. The Dischargers shall determine the success of the implemented mitigation by assessing three primary types of habitat: vernal pools, vernal pool tadpole shrimp (VPTS), and seasonal wetlands. Performance criteria, partially listed in Provision 17. through 20., and which will be more fully proposed by the Dischargers in the MMPs, will be measured, analyzed, and reported over a ten-year monitoring period. In the event that the performance criteria are not met, contingency steps spelled out in Provision 21. and 22. will be carried out, and the monitoring period will be extended by at least two years as specified in Provision 21. In the event that the performance criteria are rendered unreliable due to unforeseen inadequacies of the selected Reference Site, as determined by the Executive Officer, new performance criteria will be established as specified in Provision B. 22..

16. The Dischargers will sample and analyze data from at least 20% of the vernal pools and seasonal wetlands on the Preserve unless modified by the Executive Officer. Selection of sample sites should insure adequate representation of all vernal pools and seasonal wetlands. The final sampling plans for each phase will be subject to the approval of the Executive Officer. Aerial photography will be assessed annually to assure that hydrology and vegetation are functioning as planned and, to the extent possible, to determine the rate of spread of invasive species. Recommended aerial photography scales are 1 inch = 1000 feet for original flight photography, and 1 inch = 200 feet for photographic enlargements, other resolutions may be acceptable. Annual flights should be scheduled based on peak growth for vernal pool vegetation or seasonal wetland vegetation.

    The success of pools and wetlands will be based on a review of the hydrology, vegetation, and presence of target species on a case by case basis for each sampled pool or wetland.

Hydrology

17. The Dischargers will assess the following performance criteria for hydrology in the created vernal pools, seasonal wetlands, VPTS habitat, and California Tiger Salamander (CTS) habitat. To assure reliable depth measurements, staff gauges in each pool sampled will be tied to the same depth in reference pools:
(a) Vernal Pools: the number of days to fill, the number of days pools remain filled, and the number of days to drain must all be within 15% of the range of means for the reference vernal pools over the same period.
(b) VPTS habitat: must have standing water > 0.2 ft for at least 60 consecutive days for years when total rainfall is at least 75% of normal.
(c) CTS breeding habitat: will contain standing water continuously between January1 and June 1 in years of average or above-average rainfall.
(d) Seasonal Wetlands: the mean number of consecutive days over which the upper 0.5 ft. of soil at the swale is saturated or inundated exceeds 30 days.

Vegetation

18. The Dischargers will assess the following performance criteria for vegetation:

(a) Vernal Pools: the vegetation will be dominated by native vernal pool vegetation; the number of vernal pool species will be at least 80% of the average number of vernal pool species in the source or reference pools; the total canopy cover of vernal pool species will be at least 50% of the average cover of vernal pools species in the reference pools; the total cover will show no significant declines, and qualitative assessments of vigor and reproductive success will show no substantial differences between the Preserve and the Reference Site or source wetlands during the monitoring period.
(b) Seasonal Wetlands. [Same as for Vernal Pool vegetation except that species dominance and diversity will be based on hydrophytic wetland indicator species (OBL, FACW, or FAC) instead of on vernal pool species.].
(c) VPTS habitat: percent vegetation will cover be < 30%, and thick organic matter will not cover more than an additional 30%.

19. The Dischargers will provide the following lists for all phases of the project subject to the approval of the Executive Officer:

(a)vernal pool species expected to be found on the Preserve

(b) a list of hydrophytic wetland indicator plants likely to occur on the Preserve. This list can contain Italian Ryegrass (*Lolium multiflorum*) as a FAC wetland species, but it will not be used as a dominant in the determination of the wetlands nor will it occupy the bottom of the vernal pools, unless acceptable to the Executive Officer.

(c) a list of invasive plant species that will be controlled. Currently the proposed list is "Exotic Pest Plants of Greatest Ecological Concern in California as of August 1996". Should any plants listed as A-1, A-2, or B occur within the Preserve, the Discharger shall develop and implement a plan to control these species such that their populations will not

expand and will eventually be eliminated to the extent that they do not have a significant impact on the ecological function of the Preserve." This list will be amended, if necessary, by the Executive Officer, based on the professional judgment of the resource agencies.

Wetland Species

20. The Dischargers will assess the following performance criteria for special status species:
(a) VPTS will be provided with standing water at >0.2 ft for at least 60 consecutive days during years when total rainfall is at least 75% of normal; vegetation will be hydrophytic and total cover will be less than 30%; organic matter will cover no more than 30% of bottom; and VPTS will be present in two-thirds of the sampled habitats established for it. A minimum of 31 acres of VPTS habitat occupied by VPTS should replace that considered suitable for VPTS and which will be lost to the development project. Success will be determined by the Executive Officer in consultation with the FWS and DFG at years 5 and 8 based on a minimum VPTS density that will consider data from the Reference Site and other areas occupied by this species.
(b) Success of Phase 1 will depend on the presence and reproduction of adult VPTS for 3 years in wetlands designated as their habitat when wetlands contain water, unless dry-season sampling is necessary.
(c) The preserved CTS breeding ponds will be monitored to determine if they contain standing water continuously between January 1 and June 1 in years of average or above-average rainfall. If monitoring fails to show this outcome, the Dischargers will propose corrective management measures to the satisfaction of the Executive Officer. The location of rainfall gauges will be specified in the MMP and is therefore subject to the Executive Officer's approval.

CTS breeding will be surveyed by aquatic sampling twice annually, once during March 15 to April 15 and once during April 15 to May 15 according to CDFG protocols, in a representative subset of pools suitable for CTS breeding, submitted as part of the MMP. Monitoring must show that the breeding success in the monitored ponds is stable or increasing, unless instabilities or declines are occurring on the Reference Site. If monitoring fails to show this outcome, the Dischargers will propose corrective management measures to the satisfaction of the Executive Officer.

Contingency Measures

21. If monitoring shows a mitigation wetland to be unsuccessful after construction, and one year of repair does not lead to marked improvement, the Dischargers shall construct a replacement wetland the following year, and the ten year monitoring program will begin again.

If more than 30% of any individual failing mitigation wetlands must be repaired, then monitoring for those wetlands will be extended for 2 years. If less than 30% of any individual failing mitigation wetlands must be repaired, then the monitoring schedule can

continue through year 10. If more than 30% of the wetlands in any of the phased mitigation and restoration areas require significant repair of any type, then the entire phased mitigation and restoration area will be monitored for an additional 2 years.

22. If the Executive Officer finds that the Preserve fails to meet the performance criteria by Year 7, then the Dischargers shall propose possible mitigation replacement off site. If the Preserve has failed to meet the performance criteria by Year 10, then wetland replacement will be required at a minimum ratio of 2 acres restored or created for each of the acres lost of the 77-acre mitigation. The Dischargers may submit rationale demonstrating why an alternative level of wetland replacement is appropriate. If off-site mitigation replacement is required, the new site will seek to restore the same type of wetland habitat lost by the development project. Those wetland types are vernal pools, seasonal wetlands, wet meadows, and transitional and upland habitats. Off-site replacement wetland mitigation will occur at one or more of the properties listed on the Refuge's description of property within the Refuge boundaries not currently owned by the Refuge, or properties that may otherwise be identified by the Refuge and the Executive Officer.

    Since many of the performance criteria are tied to the success of vernal pools and seasonal wetlands on the Reference Site, the Dischargers will submit new performance criteria, subject to Executive Officer approval, in the event that the Reference Site becomes unsuitable based on an Executive Officer determination. U.S. EPA's Vernal Pool Monitoring Guidelines (Appendix A, Draft, March 24, 1994) will be considered in developing any new performance criteria for vernal pools.

Long Term Management of the Preserve

23. The Dischargers will prepare, as part of the Long-Term Management Plan, a plan for determining what kinds and how many ungulates or sheep per unit area will provide optimal grazing to control invasive species while avoiding the target native species. This plan should include tests that will be applied to grazed lands to determine the most environmentally sound grazing plan. This scheme will be submitted to the Executive Officer by January 2005 to allow ample time for the Preserve to become established.

24. When the Dischargers have determined that mitigation has achieved success criteria for each phase of mitigation implementation, they shall submit a notice of mitigation completion, acceptable to the Executive Officer. The notice of mitigation completion shall include a plan for long-term maintenance and management, including funding in perpetuity for these management activities, which is acceptable to the Executive Officer, for each mitigation phase. After acceptance by the Executive Officer of the notice of completion, submittal of annual mitigation reports for the mitigation phase is no longer required.

25. The Dischargers shall submit a surety bond in the amount of $10,000,000 to secure the construction, operation, and maintenance, and possible repair of mitigation waterbody areas. A substantial portion of the total initial bonding amount shall be retained until the

end of the ten year monitoring period as security for possible repair of the mitigation, and other contingencies. The Bond shall be held by Catellus and a surety incorporated under the laws of its state, and authorized to execute bonds and undertakings a surety, in favor of the San Francisco Bay Wildlife Society, or any other qualified organization approved by the FWS, and the Board. The bond shall terminate upon approval by the Executive Officer that the mitigation plan has been implemented and performance criteria have been met. Portions of the bond equal in cost to the mitigation construction phases, may be released upon completion of the wetland mitigation construction phases, upon submittal of reports of completion for each Phase, subject to approval by the Executive Officer. The Board will take necessary action to recover the bond if the Dischargers fail to meet the mitigation requirements. Alternative means of providing necessary financial assurances shall be allowed only with the approval of the Executive Officer.

26. Additional Mitigation to be Provided by the Dischargers

a) Refuge Capital Improvements With Maintenance Endowment

The Dischargers will provide funding for capital improvements, with a maintenance endowment, for the Refuge's existing 255-acre Seasonal Wetlands Unit. The Dischargers shall submit a plan and schedule for providing such funding, acceptable to the Executive Officer, by September 3, 1999.

b) Additional Mitigation Property

The Dischargers will acquire additional wetlands habitat acreage, or land on which additional mitigation can be constructed, from the Refuge's list of desirable acquisitions (Attachment C.). This acquisition and the conveyance to the Refuge of this acquisition shall include appropriate capital improvements, such as fencing.

The Dischargers shall report to the Executive Officer on progress of completing this acquisition and conveyance to the Refuge within one year of the adoption of this Order. This acquisition and conveyance to the Refuge shall be acceptable to the Regional Board and shall occur before Development Area B, in Figure 2., can have development-related ground disturbance or construction occur.

27. The Dischargers shall be considered to have a continuing responsibility for ensuring compliance with the Prohibitions, and Provisions of this Order in the operations or use of the site. The Dischargers shall notify the Board when a change in ownership to the Refuge occurs for the 391-acre Preserve and 53-acre Stevenson Parcel.

28. These Requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws, regulations or rules of other programs and agencies nor do these Requirements authorize the discharge of wastes without appropriate permits from other agencies or organizations.

29. The Dischargers shall submit copies of all necessary approvals and/or permits for the project and mitigation projects from applicable government agencies, including DFG, the FWS, and the Corps, prior to the start of construction.

30. These Requirements permit the discharge of earthen fill material into 46 acres of delineated wetland, seasonal wetland, vernal pools, and wet meadows within the 305-acre development area in Figure 2, Attachment A, on the Pacific Commons site, and other minor discharges incidental to restoration of the mitigation waterbody areas. Of this 46 acres, 21.5 have been disclaimed from Corps jurisdiction. The fill of Development area A within the project site can occur upon the approval of applicable permits and these Requirements. The fill of Development area B cannot occur until VPTS have reproduced for three winter seasons in the Phase 1 mitigation area (Figure 3 , Attachment A), or as otherwise described in Provision B. 14. and until the land acquisition and conveyance required in Provision B. 26. is completed.

31. This Order and Permit may be modified, revoked and reissued, or terminated in accordance with applicable State regulations. Cause for taking such actions includes, but is not limited to:

    a. Violation of any term or condition contained in the Order and Permit;

    b. Obtaining the Order and Permit by misrepresentation, or by failure to disclose fully all relevant facts; and

32. Duty to Provide Information: The Dischargers shall furnish, within a reasonable time, any information the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit. The Dischargers shall also furnish to the Board, upon request, copies of records required to be kept by its permit.

33. All of the documents which the Dischargers are required to submit for the Executive Officers approval will be incorporated in an ongoing manner, into one single document, titled the "Compiled Mitigation Design, Monitoring Plan and Long Term Management Plan for the Pacific Commons Project, with Related Plans and Requirements".

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 21, 1999.

Loretta K. Barsamian

Loretta K. Barsamian
Executive Officer

Attachments:

A - Figures
B – Summary of Due Dates
C - List of Desirable Properties for acquisition by the Refuge.

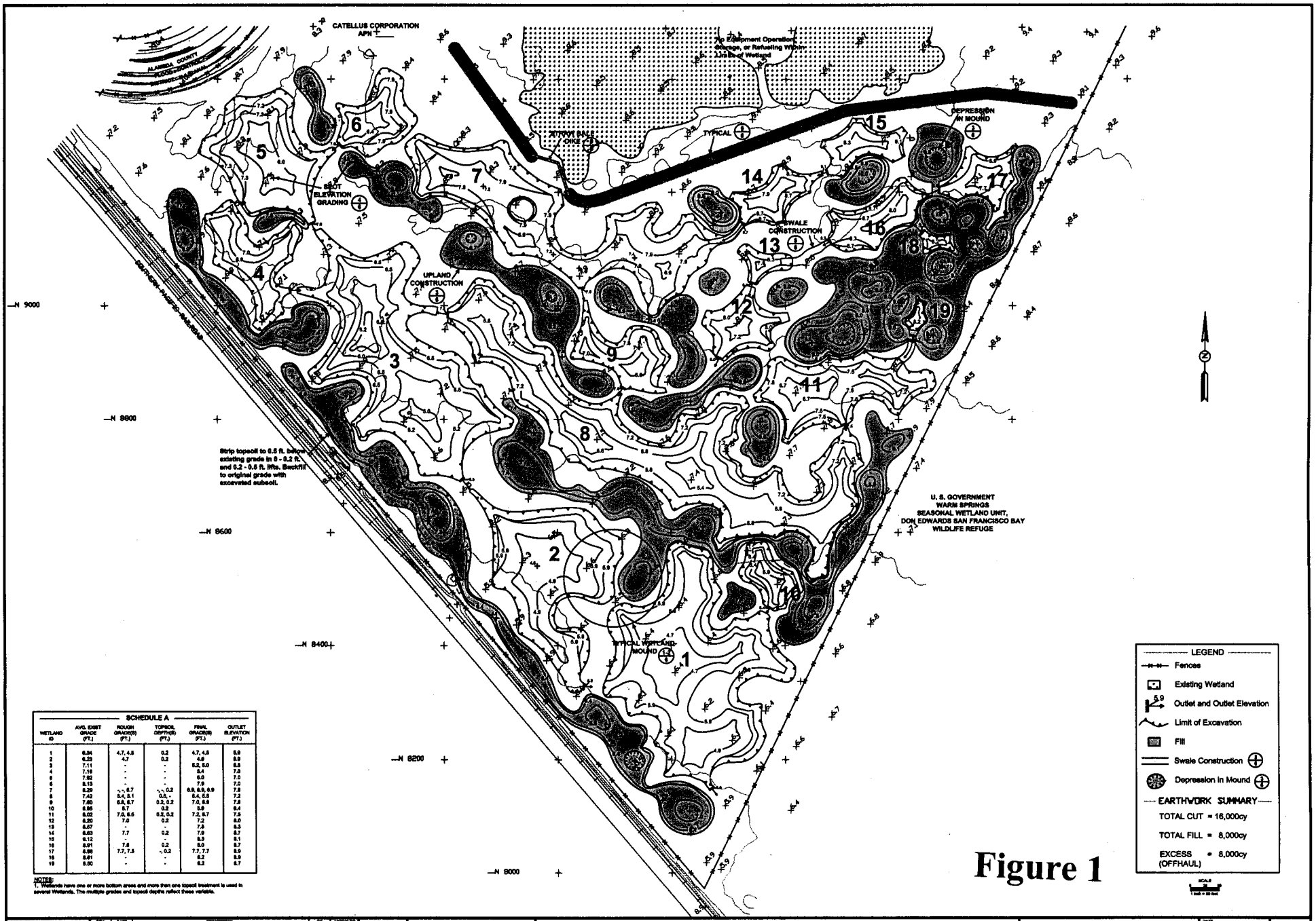
ATTACHMENT A

FIGURES

Figure 1. Grading Plan for Pilot Mitigation Wetland, Phase 1

Figure 2. Overall Site Plan Showing Development Phases A and B

Figure 3. Site Plan with Four Wetland Mitigation Phases Indicated



SCHEDULE A

WETLAND ID	AVG. EXIST GRADE (FT.)	ROUGH GRADE(S) (FT.)	TOPSOIL DEPTH(S) (FT.)	FINAL GRADE(S) (FT.)	OUTLET ELEVATION (FT.)
1	6.24	4.7, 4.8	0.2	4.7, 4.8	6.0
2	6.29	4.7	0.2	4.8	6.0
3	7.11	-	-	6.2, 6.0	6.5
4	7.18	-	-	6.4	7.0
5	7.62	-	-	6.6	7.0
6	8.13	-	-	7.8	7.0
7	8.29	-, -, 6.7	-, -, 0.2	6.8, 6.8, 6.9	7.0
8	7.42	6.4, 6.1	0.5, -	6.4, 6.6	7.2
9	7.80	6.6, 6.7	0.2, 0.2	7.0, 6.9	7.2
10	6.56	6.7	0.2	6.9	6.4
11	6.02	7.5, 6.5	0.2, 0.2	7.2, 6.7	7.5
12	6.20	7.0	0.2	7.2	6.0
13	6.67	-	-	7.5	6.2
14	6.83	7.7	0.2	7.9	6.7
15	6.12	-	-	6.3	6.1
16	6.91	7.6	0.2	6.9	6.7
17	6.96	7.7, 7.5	-, 0.2	7.7, 7.7	6.9
18	6.81	-	-	6.2	6.9
19	6.80	-	-	6.2	6.7

NOTES:
1. Wetlands have one or more bottom areas and more than one topsoil treatment is used in several Wetlands. The multiple grades and topsoil depths reflect these variable.

Figure 1

DESIGNED	REV.	DATE	DESCRIPTION	BY	APPROVED
T. HANNA, L.P. STROMBERG, PhD					
DRAFTED: S. N. DAILEY					
CHECKED: T. HANNA, L.P. STROMBERG, PhD					

BENCH MARK SURVEY

JMH Weiss, Inc.
Laurence P. Stromberg, Ph.D.
Wetlands Consultant
Hydro Science

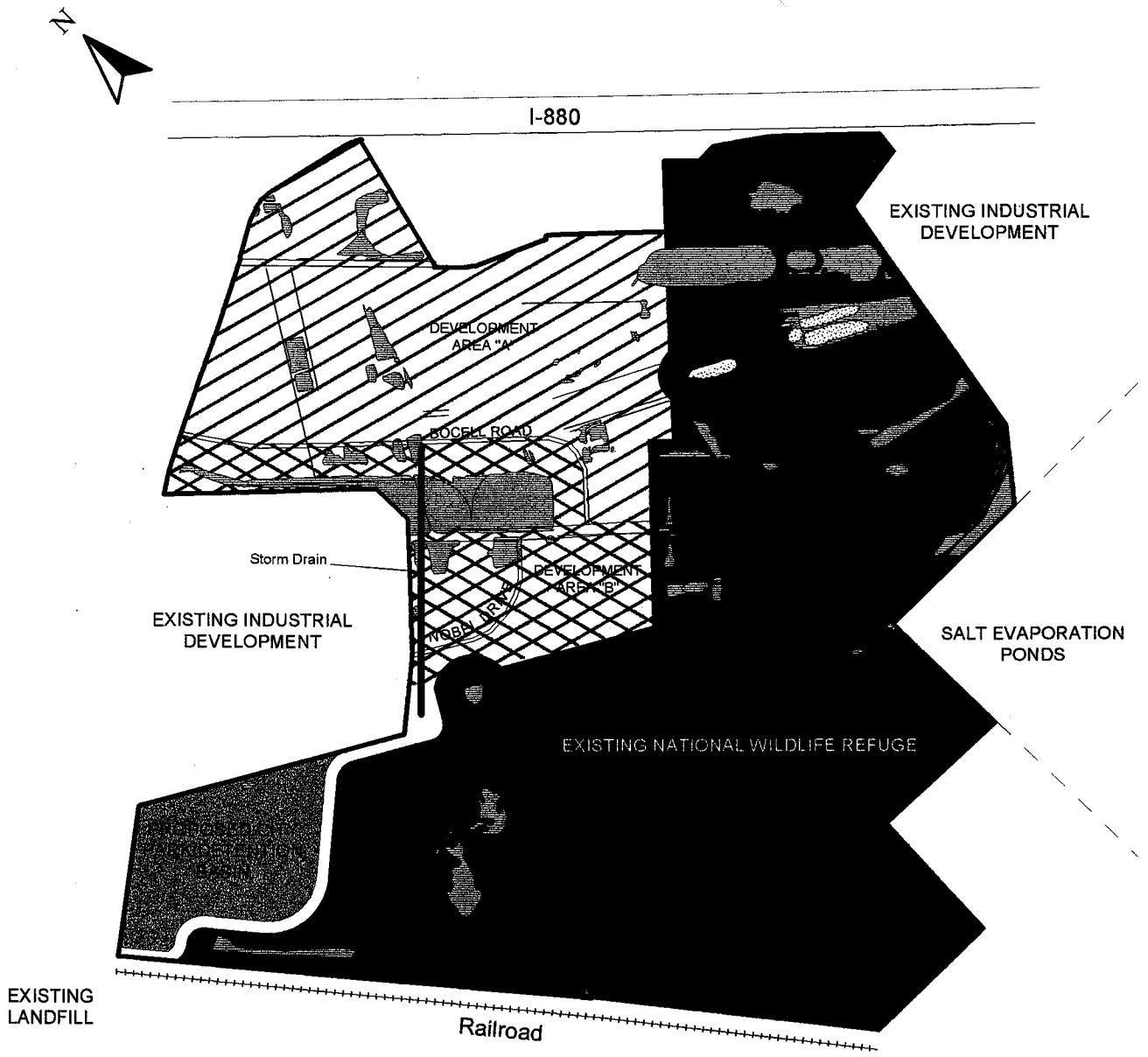
PACIFIC COMMONS WETLANDS RESTORATION
PHASE I, STEM SITE, FREMONT, CALIFORNIA
CATELLUS DEVELOPMENT CORPORATION

GRADING PLAN

DATE: 8/99
SCALE: 1" = 80'
PROJECT NO.

SHEET 2 OF 6

DEVELOPMENT AREAS AND LOCATION OF STORM DRAIN THROUGH OKLAHOMA POOL



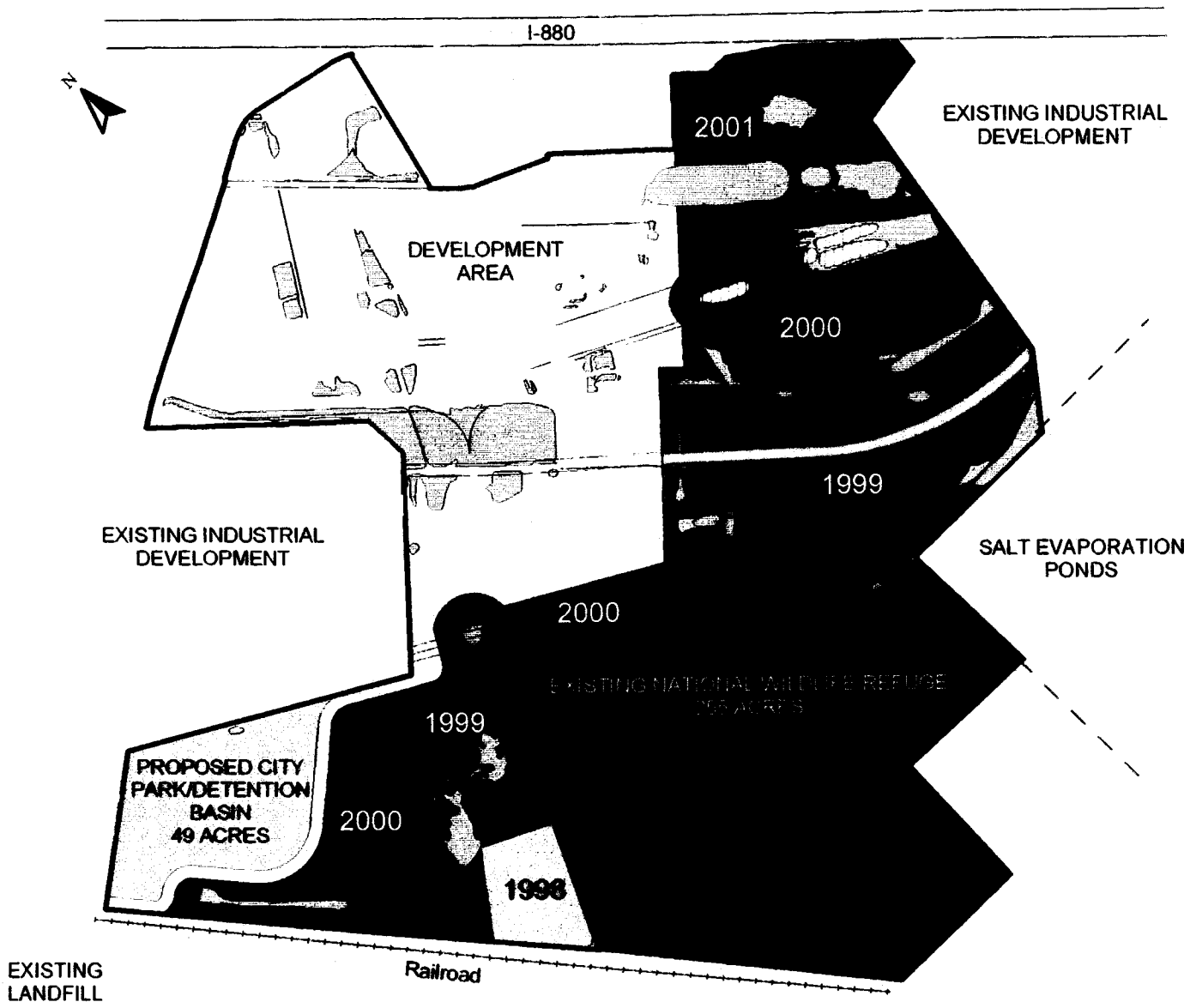
LEGEND

- SEASONAL WETLANDS
- GOLDFIELD POPULATIONS
- PROPOSED CITY PARK/ DETENTION BASIN
- PRESERVE AREAS
- EXISTING NATIONAL WILDLIFE REFUGE
- AREA REPRESENTING 10 ACRES

Pacific Commons Project Site
Fremont, California

750 0 750 1500 FEET

Figure 2



LEGEND

- SEASONAL WETLANDS
- GOLDFIELD POPULATIONS
- PROPOSED CITY PARK/ DETENTION BASIN
- EXISTING NATIONAL WILDLIFE REFUGE
- 1998 PHASING
- 1999 PHASING
- 2000 PHASING
- 2001 PHASING

390-ACRE REFUGE ALTERNATIVE RESTORATION PHASING PLAN
Pacific Commons Project Site
Fremont, California

715 0 715 1430 FEET

Figure 3

ATTACHMENT B

SUMMARY OF DUE DATES

ORDER NO. 99-061

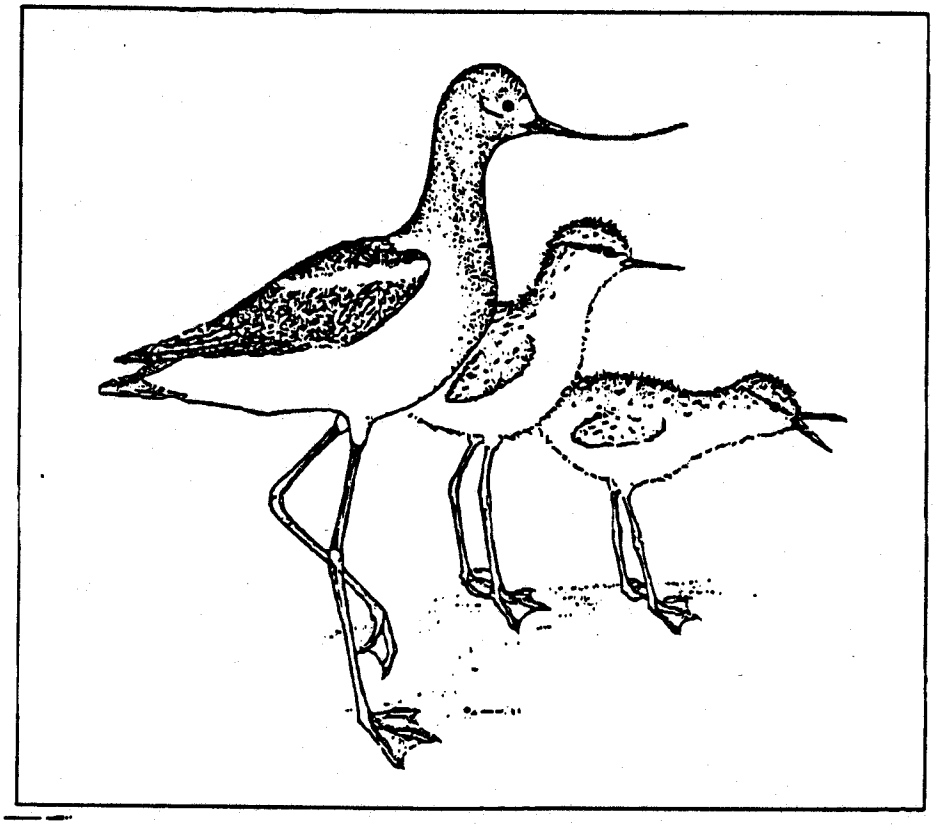
Report	Permit Provision	Due Date for Submittal
Annual Mitigation Monitoring Reports	B. 14	July 1, during Ten Year Monitoring period or longer, per Provision B. 21.
Annual reports shall be submitted by the above calendar dates every year from 1999 until submittal of the final notice of completion of mitigation, and transfer of the Preserve to the Refuge, acceptable to the Executive Officer.		
Mitigation and Monitoring Plans	B.14	Phase 2, 30 days prior to earth disturbance for Development Area A Phase 3, April 1 of year following Phase 2 construction Phase 4, April 1 of year following Phase 3 construction
Target Vegetation Lists (1) Native Vernal Pool Species (2) Hydrophytic Wetland Vegetation including Indicator Status (3) Invasive Plants to be Controlled Including indicator status	B. 19	December 1, 1999
LTMP Experimental Plan	B. 23	January 1, 2005
Refuge SWU Capital Improvement and Long Term Maintenance Funding Plan	B. 26	September 3, 1999

Plan

Report on Progress Toward Acquisition Of Additional Wetlands	B. 26	One year from adoption of this Order

ATTACHMENT C.

LAND PROTECTION PLAN



Potential Additions to San Francisco Bay National Wildlife Refuge

Alameda, San Mateo and Santa Clara Counties, California

September 1990

LAND PROTECTION PLAN

for

POTENTIAL ADDITIONS TO
SAN FRANCISCO BAY NATIONAL WILDLIFE REFUGE
Alameda, San Mateo, and Santa Clara Counties, California
September 1990

PROJECT DESCRIPTION

San Francisco Bay National Wildlife Refuge (refuge) was authorized by Congress in 1972. The refuge is located in south San Francisco Bay within the counties of Alameda, San Mateo, and Santa Clara. The purposes for establishing the refuge were "... for the preservation and protection of critical habitat and associated wildlife, including species known to be threatened with extinction, and to provide opportunity for wildlife oriented recreation and nature study in the open space preserved." To date, the U.S. Fish and Wildlife Service (Service) has acquired or otherwise controls 18,219 acres of land, tidal flats, fresh and saltwater marshes, salt ponds, and open waters within the 23,000-acre refuge boundary that was approved in 1972.

On October 28, 1988, Congress passed Public Law 100-556, which increased the Service's acquisition authority for the refuge from 23,000 acres to a total of 43,000 acres. Congress also provided $3.75 million for acquisition in Fiscal Year 1990. The maps provided with this land protection plan show the area approved for refuge acquisition in 1972 and the potential additions to the refuge approved in 1990.

THREAT

Before the arrival of Europeans in the mid-1800s, San Francisco Bay was surrounded by approximately 860 square miles of marshes and hundreds of square miles of mud flats which provided excellent habitat for waterfowl, shorebirds, and many other species of wildlife. Since that time, man's activities such as urban development, agricultural use, industrial use, and construction of salt ponds, have caused major changes in San Francisco Bay. The total area of the bay has been reduced by 37 percent from what it was in the mid-1800s. Freshwater wetlands are the most rapidly disappearing wetland type in south San Francisco Bay. Loss and degradation of freshwater wetlands and other habitat types including estuarine open water, salt marsh, mud flats, uplands, and farmed wetlands in south San Francisco Bay, have had a net detrimental effect on fish and wildlife using the bay. Preservation, enhancement, and management of wildlife habitat in the south bay will enhance the purposes for which the refuge was originally established. These purposes as stated in Public Law 92-330 are:

1. For the preservation and enhancement of highly significant wildlife habitat.

2. For the protection of migratory waterfowl and other wildlife, including species known to be threatened with extinction.

3. To provide an opportunity for wildlife oriented recreation and nature study within the open space so preserved.

PROPOSED ACTION

Because of the great loss of wetlands that has already occurred, not only in the San Francisco Bay area but also across most of North America, the Service must act now to protect, enhance, restore, and manage as many of the remaining wetlands as practicable. Such action will provide opportunities for increased public use and enjoyment of this nation's natural resources.

The Service proposes to acquire up to 20,000 acres of additional lands, marshes, tidal flats, salt ponds, submerged lands, and open waters in the south San Francisco Bay area to add to the existing refuge as authorized and funded by Congress.

RESOURCE PROTECTION ALTERNATIVES

Several alternatives were considered to determine the most appropriate and cost-effective means of providing protection of the wildlife resources in perpetuity and providing for public enjoyment of these resources. These alternatives included:

1. A combination of fee title acquisition, conservation easement acquisition, lease, and cooperative agreements. This is the Service's preferred alternative.

2. No action.

3. Acquisition of all additions to the refuge in fee title.

4. Acquisition of all additions to the refuge by purchasing perpetual conservation easements.

5. Acquisition/management by others.

6. Relying solely on land use zoning to protect the resource.

7. Looking at various scenarios of habitat types to determine the sizes and configurations of the areas to be proposed for acquisition.

A combination of fee title acquisition, conservation easement acquisition, lease, and cooperative agreements (the preferred alternative) was selected as the best method for protecting and enhancing wildlife habitat in south San Francisco Bay for the following reasons:

1. It is the most practical and feasible of the alternatives considered and will provide for long-term protection, enhancement, and restoration of habitat in order to meet the needs of wildlife and people.

2. It is the most cost-effective means to preserve, enhance, and restore the natural resources.

3. It will provide the most management flexibility compared with other feasible alternatives.

4. It is consistent with Service goals in meeting objectives of the Endangered Species Act.

5. It is in accordance with the North American Waterfowl Management Plan.

6. It is in accordance with the Concept Plan for Waterfowl Habitat Protection, San Francisco Bay, California.

7. It is consistent with Service goals to provide habitat and management for many species of waterfowl, waterbirds, anadromous fish, shellfish, and other wildlife, including endangered and sensitive species.

8. It is in accordance with recovery plans for the salt marsh harvest mouse, California clapper rail, California least tern, brown pelican, and peregrine falcon.

9. It is in accordance with the Wetlands Action Plan - 1990.

The other alternatives were given serious consideration but were not selected as the preferred alternative for many reasons that were discussed in the final environmental assessment. Some of the reasons cited were:

1. They would not provide sufficient protection of the wildlife resource.

2. They would be more costly.

3. They would not provide for desired management flexibility.

4. They would not be consistent with the intent of Congressional legislation.

ACQUISITION ALTERNATIVES

It is anticipated that acquisition will be accomplished by a combination of fee purchase, purchase of perpetual conservation easements, donations, partial donations, joint ventures, leases, and exchanges. It is also anticipated that some land identified for potential addition to the refuge may not be acquired, but may be managed by cooperative agreements between the Service and the landowners.

On Table 1 of this plan, the Service has identified, on a tract-by-tract basis, whether we plan to acquire fee ownership, a lease, or if an agreement with the landowner is anticipated. The listing is provided to inform the reader of the type of habitat protection which will most likely be used. As we proceed with the project, however, alternatives may be preferred by the landowners, and these alternatives could be utilized. For example,

conservation easements may be used in many cases where fee acquisition has been identified. Public entities may prefer to transfer title rather than enter into agreements. The Service will discuss the various alternatives in further detail with the landowners.

Funding for purchase of habitat will most likely come from the Land and Water Conservation Fund.

COORDINATION

The proposal to acquire land to add to the existing San Francisco Bay National Wildlife Refuge was discussed with a large number of landowners; conservation organizations; Federal, State, County, City, and other local entities; and interested groups and individuals. The purpose of these consultations was to inform and coordinate with all of the potentially affected interests early in the planning process to identify effects of the proposal and evaluate practical alternatives. Personal contacts, news releases, and "open houses" (public meetings) were techniques used to solicit public involvement. Public hearings were conducted in conjunction with the legislation. Landowners within the project proposal were contacted in person when possible and practical. Others were contacted by mail and/or phone.

Input and comments were received from many people during both the early planning stages and the review process. All comments were given serious consideration in the overall analysis of responses and in the preparation of the final environmental assessment. Approximately 800 copies of the final environmental assessment were distributed to the public for an additional review period.

SOCIO-CULTURAL IMPACTS

An archaeological records search revealed that the area is rich in archaeological and ethnographic sites and historic landmarks. The Service will ensure that these sites are protected before implementing any management activities that could adversely affect them.

The proposed acquisition will not have a significant impact on the human environment because:

1. The natural processes under which much of the area has evolved will be permitted to continue, and some of the area's wildlife habitat values will be restored and/or enhanced.

2. The proposal is consistent with most of the general plan designations in the affected cities and counties (pages 30-36 in the final environmental assessment).

3. Mitigation for removing lands from private ownership and placing them into public ownership will be accomplished by compensating current owners the appraised fair market value for their properties. Monies paid annually to the affected counties via the Refuge Revenue Sharing

Act will help offset the loss of revenues from property taxes on lands acquired in fee title.

4. Impacts to the local economy will not be significant for the following reasons:

   a. The Service's acquisition plans do not prohibit environmentally sound development which conforms to local plans.

   b. The Service's acquisition plans would have only an indirect effect on the economy over time considering the context of the entire south bay planning and development scheme, and considering that the affected counties and cities have the authority to ultimately control growth within the south bay area. Visitors attracted to the refuge will have a beneficial effect on the general area because they will spend money on food, lodging, transportation, entertainment, etc., and therefore help the local economy.

5. The action will not have an adverse impact on threatened or endangered species or other natural flora or fauna.

SUMMARY OF PROPOSED ACTION

The priority for land protection, as discussed in the final environmental assessment, has been grouped into the three categories listed below.

Priority 1 includes:

A. Nontidal wetlands. These wetlands are not subject to the ebb and flow of the tides. These include areas commonly referred to as seasonal wetlands, permanent wetlands, farmed wetlands, diked former tidelands, riparian, and other terms.*

B. Abandoned salt ponds. These are areas formerly used in the salt production process including, but not limited to, intake ponds, crystallizer ponds, concentrator ponds, wash ponds, and bittern storage ponds.

C. Endangered species habitat requiring active management.

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*Wetland types identified as potential additions to the refuge are classified by the Service as palustrine, lacustrine, or estuarine. For a technical definition of wetland categories, refer to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979). This publication describes the wetland classification system adopted by the U.S. Fish and Wildlife Service.

Priority 2 includes all other habitat types except active salt ponds. These include all tidal wetland types and uplands. Uplands (nonwetlands) have also been identified for inclusion as potential additions to the refuge where they are interspersed within wetlands, act as buffers to wetlands, have values ecologically integrated with other refuge lands, or are needed for refuge administration.

Priority 3 includes all active salt ponds. Active salt ponds include concentrator ponds and most crystallizer ponds. Purchase of active salt ponds would proceed in accordance with Congressional intent. The Congressional Record for Public Law 100-556 (Senate: 10/14/88) states: "The salt ponds contemplated for acquisition are currently used as salt evaporator ponds and salt crystallizer ponds. The acquisition of the lands in active use for salt production is a low priority for the refuge, since the salt production operations are not currently detrimental to the health of wildlife in the refuge. Should the salt production operations be discontinued in the future, the Service should seek to acquire the wetlands on which those operations currently take place." The Service recognizes that generally the salt evaporator ponds have provided, and continue to provide, valuable wildlife habitat.

A prioritized listing of each parcel is provided as a part of Table 1. The Service's acquisition efforts for the next few years will be focused on the priority 1 parcels. If owners of other tracts want to sell or donate their properties to us or enter into an agreement, we would, of course, be willing to consider their proposals.

Opportunities to cost-share acquisitions with other public agencies and nonprofit organizations are starting to surface. These joint ventures will be especially useful with some of the larger, higher-valued properties. The Service looks forward to working with these various entities.

Table 1. Ownerships, Acreages, and Acquisition Priorities of Lands Within the Potential Refuge Expansion Area. (Under the column heading "Interest Desired by Service", A = Agreement, F = Fee, and L = Lease).

Tract Number	Priority	Acres	Owner	Interest Desired by Service
1a	2	196.00	United States of America (NASA)	A
1b	2	201.00	United States of America (Navy)	A
2a	2	173.00	State of California	L
2b	1A	7.00	State of California	L
2c	2	187.00	State of California	L
2d	2	139.00	State of California	L
2e	2	150.00	State of California	L
2f	1A	43.00	State of California	L
2g	2	28.00	State of California	L
2h	1A	69.00	State of California	L
2i	2	42.00	State of California	L
2j	2	58.00	State of California	L
2k	2	55.00	State of California	L
21	2	58.00	State of California	L
2m	2	19.00	State of California	L
94	1A	40.00	G.R. Heath Trust	F
94a	1A	3.00	G.R. Heath Trust	F
95	1A	283.00	Peery, Arrillaga, and Siri Trusts	F
96	1A	39.00	Alpha Heath Rogers Trust	F
127	1B	65.00	Leslie Salt Company	F
150	1B	700.00	Leslie Salt Company	F
151	1B	92.00	Leslie Salt Company	F
152	2, 3	1,952.00	Leslie Salt Company	F
153	1A	11.00	Leslie Salt Company	F
154	3	2,072.00	Leslie Salt Company	F
155	3	599.00	Leslie Salt Company	F
156	1B	119.00	Leslie Salt Company	F
157	3	2,521.00	Leslie Salt Company	F
158	3	869.00	Leslie Salt Company	F
159	3	2,089.00	Leslie Salt Company	F
160	3	867.00	Leslie Salt Company	F
161	3	362.00	Leslie Salt Company	F
162	3	484.00	Leslie Salt Company	F
163	3	668.00	Leslie Salt Company	F
164	3	252.00	Leslie Salt Company	F
165	3	717.00	Leslie Salt Company	F
166	3	1,271.00	Leslie Salt Company	F
168	3	418.00	Leslie Salt Company	F
169	1A	30.00	Leslie Salt Company	F
201	2	73.00	Santa Clara Valley Water District	A
201a	2	12.00	Santa Clara Valley Water District	A
202	2	135.00	City of Redwood City	F,A
203	2	206.00	City of Palo Alto	F,E,A
204	1A	4.00	Union Sanitary District	A
205	1C	171.00	Alameda County Flood Control	A
205a	1C	175.00	Alameda County Flood Control	A

Table 1. Ownerships, Acreages, Acquisition Priorities, and Service's Desired Interests for Lands Within the Potential Refuge Expansion Area (continued).

Tract Number	Priority	Acres	Owner	Interest Desired by Service
205b	2	501.00	Alameda County Flood Control	A
205c	2	.40	Alameda County Flood Control	A
205d	2	40.00	Alameda County Flood Control	A
205e	1A	.10	Alameda County Flood Control	A
205f	2	6.10	Alameda County Flood Control	A
205g	2	.50	Alameda County Flood Control	A
205h	1A	2.00	Alameda County Flood Control	A
205i	1A	400.00	Alameda County Flood Control	A
206	2	42.00	City of Mountain View	A
207	1B	30.00	San Mateo County	A
208	1A	80.00	City of San Jose	F
208a	1A	3.16	City of San Jose	F
208b	1A	40.00	City of San Jose	F
208c	1A	.10	City of San Jose	F
208d	1A	1.25	City of San Jose	F
208e	1A	2.91	City of San Jose	F
208f	1A	3.75	City of San Jose	F
208g	1A	3.12	City of San Jose	F
208h	1A	1.73	City of San Jose	F
208i	1A	3.80	City of San Jose	F
208j	1A	2.57	City of San Jose	F
208k	1A	.83	City of San Jose	F
208l	1A	2.71	City of San Jose	F
208m	1A	2.78	City of San Jose	F
208n	1A	3.68	City of San Jose	F
208o	1A	3.68	City of San Jose	F
208p	1A	3.80	City of San Jose	F
208q	1A	3.87	City of San Jose	F
208r	1A	.21	City of San Jose	F
208s	1A	1.73	City of San Jose	F
208t	1A	2.64	City of San Jose	F
208u	1A	1.73	City of San Jose	F
208v	1A	1.04	City of San Jose	F
208w	1A	.07	City of San Jose	F
208x	1A	.16	City of San Jose	F
208y	1A	1.04	City of San Jose	F
208z	1A	2.05	City of San Jose	F
209	1A	3.95	Santa Clara County	F
209a	1A	3.68	Santa Clara County	F
209b	1A	4.09	Santa Clara County	F
209c	1A	3.80	Santa Clara County	F
209d	1A	2.52	Santa Clara County	F
209e	1A	2.29	Santa Clara County	F
209f	1A	2.91	Santa Clara County	F
209g	1A	.90	Santa Clara County	F
209h	1A	1.67	Santa Clara County	F
209i	1A	.21	Santa Clara County	F

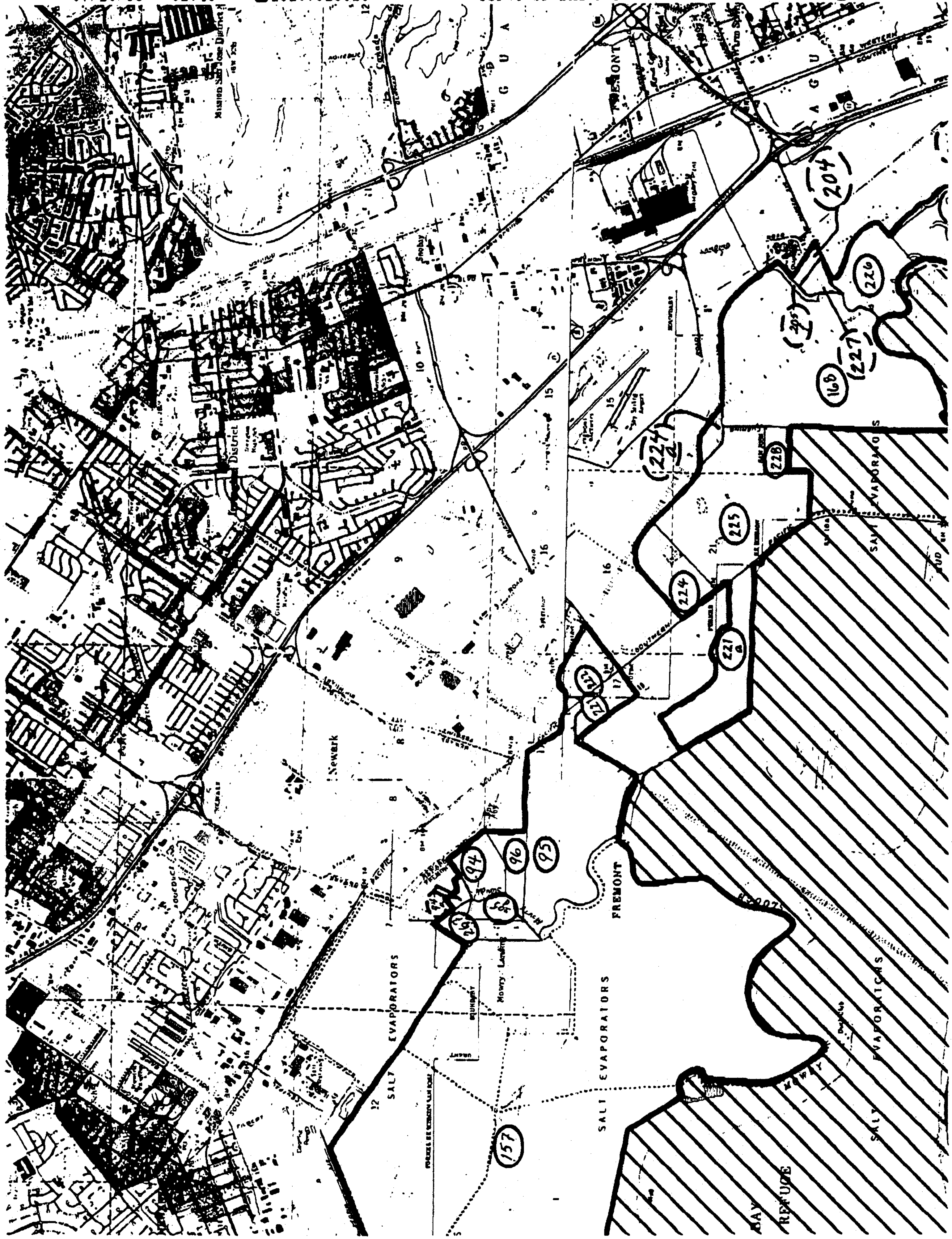
Table 1. Ownerships, Acreages, Acquisition Priorities, and Service's Desired Interests for Lands Within the Potential Refuge Expansion Area (continued).

Tract Number	Priority	Acres	Owner	Interest Desired by Service
209j	1A	.76	Santa Clara County	F
209k	1A	1.46	Santa Clara County	F
209l	1A	3.05	Santa Clara County	F
210	1B	33.00	Oliver Properties	F
210a	1A	131.00	Oliver Properties	F
210b	1B	155.00	Oliver Properties	F
211	1A	81.00	Weber, Heil	F
212	2	.50	Sharp, Grace	F
213	1A	25.00	Owens-Corning Fiberglass Corporation	F
213a	1A	3.00	Owens-Corning Fiberglass Corporation	F
214	1A	44.00	Munster, Irene	F
215	1A	17.00	Economy Foods, Inc.	F
216	2	155.00	R C K Properties, Inc.	F
217	1A	122.00	Marathon U.S. Realties, Inc.	F
218	1A	282.00	Patterson Properties	F
218a	1A	18.00	Patterson Properties	F
219	1A	126.00	Mayhews Landing Associates	F
220	2	7.00	Estate of Arthur Webster Haley	F
221	1A	30.00	Oakland Scavenger	F
221a	1A	120.00	Oakland Scavenger	F
222	1A	22.00	P.G. & E.	A
223	1A	26.00	Ponderosa Homes	F
224	1A	66.00	Santa Fe-Pacific	F
224a	1A	26.00	Santa Fe-Pacific	F
225	1A	255.00	Carruf California Corporation	F
226	2	93.00	King & Lyons	F
226a	1A	130.00	King & Lyons	F
226b	1A	22.00	King & Lyons	F
226c	2	.20	King & Lyons	F
227	1A	4.00	Renco Investment	F
228	1A	20.00	Onoratto, Marietta	F
229	1A	471.00	Citation Homes	F,L
230	1B	295.00	First City Corporation, et al.	F
230a	1B	793.00	First City Corporation, et al.	F
230b	1B	455.00	First City Corporation, et al.	F
230c	1B	14.00	First City Corporation, et al.	F
230d	1A	126.00	First City Corporation, et al.	F
231	1B	152.00	Mid Peninsula Regional Open Space District	A
231a	1A	54.00	Mid Peninsula Regional Open Space District	A
232	1A	.21	Peninsula Open Space Trust	F
232a	1A	.38	Peninsula Open Space Trust	F
232b	1A	.07	Peninsula Open Space Trust	F
232c	1A	.21	Peninsula Open Space Trust	F
232d	1A	.21	Peninsula Open Space Trust	F
232e	1A	1.07	Peninsula Open Space Trust	F

Table 1. Ownerships, Acreages, Acquisition Priorities, and Service's Desired Interests for Lands Within the Potential Refuge Expansion Area (continued).

Tract Number	Priority	Acres	Owner	Interest Desired by Service
232f	1A	.36	Peninsula Open Space Trust	F
232g	1A	.28	Peninsula Open Space Trust	F
234	1A	5.00	Beretta, Franco & O'Connor, John	F
235	1A	.20	Choate Estate, Bea	F
235a	1A	.20	Choate Estate, Bea	F
235b	1A	.20	Choate Estate, Bea	F
236	1A	.07	The San Jose House of Benevolence	F
237	1A	.07	Levin, Donna E.	F
238	1A	.07	Hamilton et al, Joseph	F
239	1A	.29	Haag, Russell & Lorraine, Trustees	F
240	1A	.14	Finck, William	F
241	1A	1.44	Kelsey et al, Matt	F
242	1A	.50	Warner, Edith	F
242a	1A	.10	Warner, Edith	F
242b	1A	.10	Warner, Edith	F
246	1A	.07	Sisson, Jennie (Lander)	F
248	1A	.14	Burns, Ed	F
249	1A	.36	Fenton, Minna	F
250	1A	.36	Larkin, Lenore	F
251	1A	.10	Escalante, Salvador & Gloria	F
251a	1A	.40	Escalante, Salvador & Gloria	F
252	1A	.14	Bridges, John M.	F
253	1A	.36	Giambrone, Joseph & Jenelle	F
254	1A	.07	Leitao, William	F
255	1A	.36	Kasper et al, Lenora	F
256	1A	.07	Freyshlag et al, Oscar K., Trustee	F
257	1A	.29	Belknap, Forrest	F
258	1A	.74	Lee, Dale & Roberta	F
259	1A	.86	Meddock, C.D. & Rhea	F
260	1A	.13	Gooper, Charlotte	F
261	1A	.14	Littlejohn, Donald & Florence	F
262	1A	.14	Depew, Jeffrey & Leeann	F
263	1A	.07	Chisholm, Carrie	F
264	1A	.14	DeLorenzo, Dannye	F
265	1A	.72	Gresham, L.E. & Mary	F
266	1A	60.00	Liberty Service Corporation	F
267	2	34.00	PACCAR	F
268	1A	35.00	Gimelli et al	F
269	1A	12.00	Kavanaugh, Clarence	F
270	1A	10.00	Carnduff et al, Stanley	F
Total		*24,500.00 acres (rounded to nearest 10 acres)		

*No more than 20,000 acres, of the 24,500 acres identified above, will be added to the refuge under existing authorities.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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

July 20, 1999

Ms. Loretta Barsamian, Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Pacific Commons Project

Dear Ms. Barsamian:

We wish to lend our support to the Regional Board's current efforts to obtain additional mitigation to offset the impacts to aquatic resources resulting from this project.

The Pacific Commons site contains a rare vernal pool ecosystem and has significant biological value and restoration potential. The significance of the resource and magnitude of the impact are the primary reasons for our sustained interest in the project. We are still evaluating this project, but wish to acknowledge significant progress the applicants have made in addressing our concerns (i.e. diminishing the impact of the road and the project's footprint on the site's natural resources).

We wish to offer our technical assistance to the Regional Board and project applicants in obtaining sufficient compensatory mitigation. We are appreciative on the Regional Board's vital role in this project, and hope for resolution of remaining issues in the near term. Please call me or Nancy Woo (415/744-1164) if we can be assistance.

Sincerely yours,

Alexis Strauss, Director
Water Division

cc: City of Fremont, Mayor's Office, Morrison
Catellus Development Corporation, Little
Army Corps of Engineers, San Francisco, Fong